



TRWD Stream Trailer Virtual Simulation Lesson Plan

*Teachers, please email watersheds@trwd.com to obtain the answer key.

TEKS (4th Grade)	<p><u>Science 4.3A</u>: analyze, evaluate, and critique scientific explanations by using evidence, logical reasoning, and experimental and observational testing</p> <p><u>Science 4.3B</u>: represent the natural world using models such as the water cycle and stream tables and identify their limitations, including accuracy and size</p> <p><u>Science 4.7B</u>: observe and identify slow changes to Earth's surface caused by weathering, erosion, and deposition from water, wind, and ice</p>
Objectives	<ul style="list-style-type: none"> • Identify the components of a river or stream system. • Define watershed. • Observe and describe the processes that shape rivers and streams over time.
Key Questions	<ul style="list-style-type: none"> • What are the <u>components</u> of a river or stream system? • What is a watershed? • How are rivers and streams shaped over time though natural <u>processes</u>?
Materials	<ul style="list-style-type: none"> • TRWD Exploring Watersheds Video: https://youtu.be/-4bXF3vbVo • Video Worksheet (available as editable Word document or fillable PDF)
Procedure	<p>This lesson may be completed in-person or online.</p> <p>The learner will read the worksheet to prepare for questions.</p> <p>The learner will watch the video, pausing where indicated to answer questions. Questions not associated with pause cues in the video are timestamped in the worksheet if the learner needs to rewind to review.</p>
Demonstration of Learning	<p>The learner will complete the associated worksheet with at least 90% accuracy.</p>
Extensions	<ul style="list-style-type: none"> • The learner can find out what watershed they live in. <ul style="list-style-type: none"> ○ https://trwdmaps.maps.arcgis.com/apps/webappviewer/index.html?id=76fd82a6fd064313a9371f29de3a6fb2 • The learner can write a journal about actions they can take to help keep their local river or stream clean. • The learner can build a model of a watershed using paper or tinfoil and a spray bottle. <ul style="list-style-type: none"> ○ https://water.unl.edu/documents/Crumpled%20Watershed%20Model%20opt.pdf ○ https://www.sariverauthority.org/sites/default/files/2019-07/building-a-watershed-model-activity_11.pdf